

**BY ORDER OF THE CHIEF,
NATIONAL GUARD BUREAU**



MANPOWER STANDARD 381XTC

9 SEPTEMBER 2004

Manpower Standard

**COMBAT READINESS TRAINING CENTER
AIR TRAFFIC CONTROL**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the NGB PDC WWW site at:
<http://www.ngbpdc.ngb.army.mil/angseries.asp>

OPR: ANG/XPME (Maj B. Cotton)

Certified by: ANG/CS (Col S. Wassermann)

Pages: 18

Distribution: F

This Air National Guard Manpower Standard (ANGMS) quantifies the manpower required to accomplish the tasks described in the work center description (WCD) for varying levels of workload in the Combat Readiness Training Center (CRTC) Air Traffic Control function whose mission is to provide an integrated, year-round, realistic training environment (airspace, facilities, equipment) for units to enhance their combat capability and readiness. The Air National Guard (ANG) is the authority for the approval and publication of ANG Manpower Standards. Air Force (AF) and ANG directives contain policy and procedural guidance for the operation of the CRTC Air Traffic Control function. This standard applies to the Alpena, Gulfport, Savannah and Volk Field CRTCs and is applicable to peacetime operations only. This standard was developed in accordance with AF Instruction (AFI) 38-201, *Determining Manpower Requirements*, and AF Manual (AFMAN) 38-208, Volume 1, *Air Force Management Engineering Program (MEP) - Processes*, and AFMAN 38-208, Volume 2, *Air Force Management Engineering Program (MEP) - Quantification Tools*. Send comments and suggested improvements on AF IMT 847, *Recommendation for Change of Publication*, through channels, to ANG, Management Engineering Branch (ANG/XPME / Operating Location TN [OLTN]), 3000 Handly Avenue, McGhee Tyson ANG Base, TN 37777-6283.

1. STANDARD DATA.

1.1. Approval Date: 9 September 2004

1.2. Man-hour Data Sources: Operational Audit (historical record and technical estimate techniques) and Staffing Pattern were used to collect/determine man-hour/manpower data.

1.3. Man-hour Equations.

1.3.1. Air Traffic Control Superintendent: Y = 1 (Constant Manpower).

1.3.2. Control Tower: Y = 5 (Constant Manpower).

1.3.3. Radar Approach Control: Y = 5 (Constant Manpower).

2. APPLICATION INSTRUCTIONS. These work centers require constant manpower with number of authorizations indicated in Paragraphs 1.3.1., 1.3.2., and 1.3.3., above. No other application instructions apply.

3. STATEMENT OF CONDITIONS. The normal hours of operation for this work center are eight hours per day, five days per week. Because of extensive deployed unit-in-training support, hours of operations for this work center are frequently extended both in hours of operation and number of days per week. There are no other standard of living constraints that impact the daily operation of this work center.

DANIEL JAMES III, Lieutenant General, USAF
Director, Air National Guard

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFMAN 11-230, *Instrument Procedures*

AFI 13-203, *Air Traffic Control*

AFI 32-7061, *The Environmental Impact Analysis Process*

AFMAN 36-2234, *Instructional System Development*

AFI 38-201, *Determining Manpower Requirements*

AFMAN 38-208, Volume 1, *Air Force Management Engineering Program (MEP) - Processes*

AFMAN 38-208, Volume 2, *Air Force Management Engineering Program (MEP) - Quantification Tools*

AFI 48-123, *Medical Examination and Standards*

AFMS 00AA, *Standard Indirect Allowed Man-hours*

Abbreviations and Acronyms

AF - Air Force

AICUZ - Air Installation Compatible Use Zone

ANG - Air National Guard

ANGMS - Air National Guard Manpower Standard

AOF - Airfield Operations Flight

ATC - Air Traffic Control

ATCTD - Air Traffic Control Training Device

ATERPS - Alternate TERPS

ATSEP - Air Traffic System Evaluation Program

C-CS - Communications-Computer Systems

CATCT - Chief Air Traffic Control Training

CC - Commander

CCTLR - Chief Controller

CDP - Controller Development Program

CDPOI - CDP Operating Instruction

CDR - Continuous Data Recording

CRTC - Combat Readiness Training Center

CTO - Control Tower Operator

DSN - Defense Switched Network

FAA - Federal Aviation Administration

FAAO - FAA Order

FLIP - Flight Information Publication

HAF - Headquarters Air Force

IAW - In Accordance With

IFR - Instrument Flight Rules

ISD - Instructional System Development

LAAS - Low Altitude Alerting System

MAJCOM - Major Command

MEP - Management Engineering Program

MIFRAC - Minimum IFR Altitude Charts

MSAW - Minimum Safe Altitude Warning

MVA - Minimum Vectoring Altitude

MVAC - Minimum Vectoring Altitude Charts

NAS - National Airspace System

NCP - NAS Change Proposals

NIMA - National Imagery and Mapping Agency

NOTAM - Notice to Airmen

PIDP - Programmable Indicator Data Processor

PTR - Program Technical Reports

RAPCON - Radar Approach Control

RCS - Routing Control Symbol

TERPS - Terminal Instrument Procedures

USAF - United States Air Force

UTA - Unit Training Assembly

WCD - Work Center Description

Terms

Air National Guard Manpower Standard (ANGMS). A numbered, specialized publication that quantifies manpower requirements for a work center. Also includes approved variances. See AFI 38-201.

Man-hour. A unit of measuring work. It is equivalent to one person working at a normal pace for 60 minutes, two people working at a normal pace for 30 minutes, or a similar combination of people working at a normal pace for a period of time equal to 60 minutes.

Manpower Standard. The basic tool used to determine the minimum level of manpower required to support a function. It is a quantitative expression that represents a work center's man-hour requirements in response to varying levels of workload.

Staffing Pattern. Constant manpower.

Work Center Description. A format that shows work center responsibilities structured for easy measurement of work categories, tasks and subtasks.

Attachment 2**WORK CENTER DESCRIPTION
COMBAT READINESS TRAINING CENTER (CRTC)
AIR TRAFFIC CONTROL (ATC)****A2.1. DIRECT.****A2.1.1. AIR TRAFFIC CONTROL MANAGEMENT.****A2.1.1.1. PERFORMS AIR TRAFFIC CONTROL MANAGER DUTIES:**

A2.1.1.1.1. MANAGES THE OVERALL ATC OPERATION.

A2.1.1.1.2. DEVELOPS AND NEGOTIATES WRITTEN AGREEMENT.

A2.1.1.1.3. COORDINATES, NEGOTIATES, PREPARES, AND SUBMITS LETTER OF PROCEDURE FOR REVIEW BY MAJOR COMMAND (MAJCOM).

A2.1.1.1.4. COORDINATES AGENDA AND RECORDS MINUTES OF THE BASE AIRFIELD OPERATIONS BOARD.

A2.1.1.1.5. SUPPORTS THE MID-AIR COLLISION AVOIDANCE, USAF MISHAP PREVENTION, AND BIRD AIRCRAFT STRIKE HAZARD PROGRAMS.

A2.1.1.1.6. MANAGES THE FORMAL PILOT/CONTROLLER LIAISON PROGRAM.

A2.1.1.1.7. PARTICIPATES IN THE INVESTIGATION OF HAZARDOUS AIR TRAFFIC REPORTS AND AIRCRAFT MISHAPS.

A2.1.1.1.8. REVIEWS THE CONTROLLER DEVELOPMENT PROGRAM ANNUALLY AND DIRECTS NECESSARY CHANGES.

A2.1.1.1.9. ENSURES CERTIFICATION GUIDES ARE DEVELOPED.

A2.1.1.1.10. IMPLEMENTS AND ADMINISTERS A PROGRAM TO PROVIDE ATC INDOCTRINATION AND ORIENTATION FOR WEATHER PERSONNEL.

A2.1.1.1.11. ESTABLISHES AND CONDUCTS THE MONTHLY TRAINING REVIEW BOARD.

A2.1.1.1.12. REVIEWS AND SIGNS TRAINING EVALUATION.

A2.1.1.1.13. REVIEWS AND FILES FACILITY OPERATING FORM.

A2.1.1.1.14. CANCELS POSITION CERTIFICATION AND FACILITY RATING.

A2.1.1.1.15. INITIATES WITHDRAWAL ACTION.

A2.1.1.1.16. ENSURES REQUIRED PUBLICATION IS MAINTAINED AND CURRENT.

A2.1.1.1.17. ENSURES THE COOPERATIVE WEATHER WATCH PROGRAM IS IMPLEMENTED AND MANAGED.

- A2.1.1.1.18. ENSURES A COMPREHENSIVE TRAINING PROGRAM EXISTS FOR ATC.
- A2.1.1.1.19. MAINTAINS PROFICIENCY.
- A2.1.1.1.20. AUGMENTS FACILITY STAFFING WHEN NECESSARY DUE TO STAFFING SHORTFALL.
- A2.1.1.1.21. INTERVIEWS AND RECOMMENDS SELECTION OF CANDIDATE FOR EMPLOYMENT.
- A2.1.1.1.22. EVALUATES EMPLOYEE'S JOB PERFORMANCE, WRITES APPRAISAL, AND DIRECTS REMEDIAL MEASURE TO CORRECT DISCREPANCY.
- A2.1.1.1.23. ORGANIZES, PREPARES, AND SUBMITS EMPLOYEE AND FACILITY AWARD AND DECORATION NOMINATION PACKAGE.
- A2.1.1.1.24. MAINTAINS THE ATC WEB INTRANET PAGE.
- A2.1.1.2. PERFORMS CHIEF CONTROLLER DUTIES:
 - A2.1.1.2.1. MANAGES THE INTERNAL OPERATIONS OF THE ATC FACILITY.
 - A2.1.1.2.2. ADVISES THE AIR TRAFFIC MANAGER AND OPERATIONS STAFF PERSONNEL ON PROCEDURAL AND SAFETY OF FLIGHT ISSUE.
 - A2.1.1.2.3. ESTABLISHES CREW CHANGE PROCEDURE.
 - A2.1.1.2.4. ESTABLISHES PRE-DUTY FAMILIARIZATION PROCEDURE.
 - A2.1.1.2.5. ESTABLISHES PROCEDURE FOR COMBINING OPERATING POSITIONS.
 - A2.1.1.2.6. ESTABLISHES EQUIPMENT CHECK PROCEDURE.
 - A2.1.1.2.7. ESTABLISHES PROCEDURE FOR RECORDER OPERATION.
 - A2.1.1.2.8. ESTABLISHES ALTERNATE COMMUNICATIONS PROCEDURES.
 - A2.1.1.2.9. ESTABLISHES FACILITY OPERATING REQUIREMENT.
 - A2.1.1.2.10. DEVELOPS FACILITY CHECKLIST.
 - A2.1.1.2.11. DEVELOPS POSITION READY-REFERENCE FILE.
 - A2.1.1.2.12. DEVELOPS PROCEDURE FOR SECURITY OF ATC FACILITY.
 - A2.1.1.2.13. MAINTAINS FACILITY RECENT INFORMATION FILE.
 - A2.1.1.2.14. DEVELOPS AND IMPLEMENTS TEMPORARY PROCEDURE.
 - A2.1.1.2.15. PLANS AND DEVELOPS FACILITY DUTY SCHEDULE.
 - A2.1.1.2.16. ASSIGNS CONTROLLER OPERATING INITIALS.
 - A2.1.1.2.17. COORDINATES OFF-DUTY EMPLOYMENT REQUEST.
 - A2.1.1.2.18. ENSURES CREW REST REQUIREMENTS ARE MET.

- A2.1.1.2.19. REVIEWS MEDICAL QUALIFICATION.
- A2.1.1.2.20. ENSURES CONTROLLER PROFICIENCY.
- A2.1.1.2.21. SELECTS CONTROLLER FOR WATCH SUPERVISOR/SENIOR CONTROLLER DUTIES.
- A2.1.1.2.22. ESTABLISHES REQUIREMENTS FOR FACILITY OPERATING FORM.
- A2.1.1.2.23. REVIEWS FACILITY OPERATING FORM.
- A2.1.1.2.24. ENSURES CHART, MAP, PUBLICATION, AND INSTRUCTION FILES ARE CURRENT.
- A2.1.1.2.25. PREPARES AND SUBMITS MILITARY AIR TRAFFIC ACTIVITY REPORT.
- A2.1.1.2.26. PREPARES FOR AND PARTICIPATES IN THE AIR TRAFFIC SYSTEMS EVALUATION.
- A2.1.1.2.27. INITIATES CORRECTIVE ACTION AND PREPARES REPLY TO INSPECTION REPORT.
- A2.1.1.2.28. REVIEWS AND UPDATES LETTERS OF PROCEDURE.
- A2.1.1.2.29. REVIEWS AND ESTABLISHES TRAINING REQUIREMENT.
- A2.1.1.2.30. IDENTIFIES PROFICIENCY TRAINING REQUIREMENT.
- A2.1.1.2.31. ENSURES PERSONNEL ARE CERTIFIED ON NEW EQUIPMENT AND PROCEDURES.
- A2.1.1.2.32. SELECTS PERSONNEL FOR TRAINER CERTIFICATION.
- A2.1.1.2.33. SELECTS PERSONNEL FOR DUAL QUALIFICATION TRAINING.
- A2.1.1.2.34. PREPARES FOR AND ATTENDS THE BASE AIRFIELD OPERATIONS BOARD.
- A2.1.1.2.35. PREPARES FOR AND ATTENDS THE ATC TRAINING REVIEW BOARD.
- A2.1.1.2.36. ENSURES TRAINING RECORDS ARE EXAMINED MONTHLY.
- A2.1.1.2.37. ENSURES TRAINING RECORD DISCREPANCY IS CORRECTED MONTHLY.
- A2.1.1.2.38. MONITORS AND EVALUATES INDIVIDUAL TRAINING PROGRESS.
- A2.1.1.2.39. RECOMMENDS CONTROLLER FOR CERTIFICATION/RATING.
- A2.1.1.2.40. ENTERS AND REMOVES TRAINEE FROM EXPERIENCING DIFFICULTY IN TRAINING STATUS.
- A2.1.1.2.41. INITIATES WITHDRAWAL ACTION.

A2.1.1.2.42. SUSPENDS, CANCELS, AND REINSTATES POSITION CERTIFICATION AND FACILITY RATING.

A2.1.1.2.43. INTERVIEWS AND RECOMMENDS SELECTION OF CANDIDATE FOR EMPLOYMENT.

A2.1.1.2.44. EVALUATES JOB PERFORMANCE, WRITES APPRAISAL, AND DIRECTS REMEDIAL MEASURE TO CORRECT DISCREPANCY.

A2.1.1.2.45. MAINTAINS PROFICIENCY IN ALL OPERATING POSITIONS WITHIN THE FACILITY.

A2.1.1.3. PERFORMS CHIEF OF AIR TRAFFIC CONTROL TRAINING DUTIES:

A2.1.1.3.1. COORDINATES CONTROLLER DEVELOPMENT PROGRAM (CDP) REQUIREMENTS.

A2.1.1.3.2. MAINTAINS THE CDPOI.

A2.1.1.3.3. COORDINATES CHANGE TO THE CDPOI WITH THE ATC STAFF AND MAJCOM.

A2.1.1.3.4. DEVELOPS LOCAL TRAINING MATERIAL.

A2.1.1.3.5. OVERSEES THE DEVELOPMENT OF RADAR SIMULATOR TRAINING PROGRAM.

A2.1.1.3.6. DEVELOPS AND MANAGES COMPUTER-BASED TRAINING.

A2.1.1.3.7. DEVELOPS AND MAINTAINS THE MASTER TRAINING PLAN FOR EACH FACILITY.

A2.1.1.3.8. DEVELOPS AND MAINTAINS MASTER TASK LIST.

A2.1.1.3.9. VALIDATES/REVALIDATES CERTIFICATION TIME LIMIT.

A2.1.1.3.10. VALIDATES/REVALIDATES ANNUAL TRAINING SCHEDULE.

A2.1.1.3.11. REVIEWS TRAINING RECORD FOR ACCURACY AND STANDARDIZATION.

A2.1.1.3.12. MAINTAINS TRAINEE PROGRESS TRACKING SYSTEM.

A2.1.1.3.13. PREPARES TRAINING REPORT.

A2.1.1.3.14. MAINTAINS TRAINING PRODUCT.

A2.1.1.3.15. PREPARES AND ADMINISTERS MONTHLY REVIEW/RECURRING TRAINING.

A2.1.1.3.16. MANAGES CLASSROOM TRAINING.

A2.1.1.3.17. DEVELOPS AND MANAGES NEWCOMER'S INDOCTRINATION PROGRAM.

A2.1.1.3.18. DEVELOPS TRAINING FOR NEW EQUIPMENT AND PROCEDURES.

A2.1.1.3.19. PREPARES FOR AND PARTICIPATES IN THE AIR TRAFFIC SYSTEM EVALUATION PROGRAM.

A2.1.1.3.20. INITIATES CORRECTIVE ACTION AND PREPARES REPLY TO INSPECTION.

A2.1.1.3.21. MANAGES THE AIR TRAFFIC CONTROL TRAINING DEVICE PROGRAM.

A2.1.1.3.22. MANAGES THE TRAINER/TASK CERTIFIER QUALIFICATION TRAINING PROGRAM.

A2.1.1.3.23. CONDUCTS THE MONTHLY TRAINING REVIEW BOARD.

A2.1.1.3.24. DEVELOPS AND MAINTAINS CONTINUITY BINDER.

A2.1.1.3.25. CONDUCTS SELF-INSPECTION.

A2.1.1.3.26. COORDINATES WITH BASE TRAINING MANAGER.

A2.1.1.3.27. COORDINATES WITH MAJCOM TRAINING MANAGER.

A2.1.1.3.28. MANAGES TRAINING RECORD.

A2.1.1.3.29. COORDINATES WITH AND APPOINTS ASSISTANT CHIEF OF AIR TRAFFIC CONTROL TRAINING.

A2.1.1.3.30. MAINTAINS PROFICIENCY IN ALL OPERATING POSITIONS IN EACH FACILITY.

A2.1.1.4. PERFORMS CHIEF OF STANDARDIZATION AND EVALUATION DUTIES:

A2.1.1.4.1. DEVELOPS POSITION CERTIFICATION/FACILITY RATING CHECKLIST.

A2.1.1.4.2. DEVELOPS FACILITY EVALUATION CHECKLIST.

A2.1.1.4.3. DEVELOPS OPERATIONS EVALUATION CHECKLIST.

A2.1.1.4.4. DEVELOPS CERTIFICATION TEST MATERIAL.

A2.1.1.4.5. CONDUCTS POSITION CERTIFICATION AND FACILITY RATING.

A2.1.1.4.6. ADMINISTERS POSITION CERTIFICATION AND FACILITY RATING TEST.

A2.1.1.4.7. DEBRIEFS CONTROLLER ON EVALUATION RESULT.

A2.1.1.4.8. DOCUMENTS EVALUATION RESULT.

A2.1.1.4.9. CONDUCTS ANNUAL EVALUATION.

A2.1.1.4.10. CONDUCTS PERIODIC FACILITY EVALUATION.

A2.1.1.4.11. CONDUCTS LOCAL OPERATIONS EVALUATION.

A2.1.1.4.12. EVALUATES AND PROVIDES FEEDBACK ON CDP.

A2.1.1.4.13. CONDUCTS SPECIAL EVALUATION.

A2.1.1.4.14. SUSPENDS POSITION CERTIFICATION/FACILITY RATING.

A2.1.1.4.15. PREPARES AND SUBMITS FORM.

A2.1.1.4.16. REPLACES AND REISSUES AIR TRAFFIC CONTROL SPECIALIST CERTIFICATE.

A2.1.1.4.17. ATTENDS AIRFIELD OPERATIONS BOARD.

A2.1.1.4.18. ATTENDS ATC TRAINING REVIEW BOARD.

A2.1.1.4.19. COORDINATES CERTIFICATION AND EVALUATION ACTION WITH AND APPOINTS ASSISTANT CHIEF OF STANDARDIZATION AND EVALUATION.

A2.1.1.4.20. COORDINATES CONTROL TOWER OPERATOR (CTO) CERTIFICATION AND EVALUATION ACTION WITH AND APPOINTS ALTERNATE CTO EXAMINER.

A2.1.1.4.21. MAINTAINS CONTINUITY BINDER.

A2.1.1.4.22. MAINTAINS PROFICIENCY IN ALL OPERATING POSITIONS IN EACH FACILITY.

A2.1.1.5. PERFORMS TERMINAL PROCEDURES SPECIALIST DUTIES:

A2.1.1.5.1. INITIATES ACTION ESSENTIAL TO THE FULFILLMENT OF TERMINAL INSTRUMENT PROCEDURES (TERPS) PROGRAM OBJECTIVE ASSIGNED BY PARENT MAJCOM TERPS OFFICE AND APPROPRIATE DIRECTIVE.

A2.1.1.5.2. PROCURES MAP/CHARTS FROM NATIONAL IMAGERY AND MAPPING AGENCY (NIMA) AND OTHER APPROPRIATE MAPPING AGENCY.

A2.1.1.5.3. PLOTS, VERIFIES AND UPDATES COMPUTERIZED OBSTRUCTION AND AIRFIELD DATA FROM MAP, CIVIL ENGINEERING MAP, CHART, SURVEY, AND COMPUTER DATABASE. Maintains master obstruction map.

A2.1.1.5.4. PREPARES AUTOMATED/MANUAL INSTRUMENT PROCEDURE PACKAGE FOR APPROACHES, DEPARTURES, AND STANDARD TERMINAL ARRIVAL ROUTES, TO MEET MISSION NEEDS. Prepares diverse departure computations, Minimum Vectoring Altitude Charts (MVAC), and Minimum Instrument Flight Rules (IFR) Altitude Charts (MIFRAC). Reevaluates all instrument procedures, including diverse departure, MVAC, MIFRAC, and Minimum Safe Altitude Warning (MSAW)/ Low Altitude Alerting System (LAAS) operations when obstacles are added/deleted from the TERPS database.

A2.1.1.5.5. COORDINATES NEW AND REVISED INSTRUMENT PROCEDURES WITH APPROPRIATE AGENCY.

A2.1.1.5.6. COORDINATES NEW AND REVISED RADAR APPROACH PROCEDURES WITH APPROPRIATE AGENCY.

A2.1.1.5.7. NOTIFIES THE MAJCOM TERPS OFFICE WHENEVER LOCATION/OBSTACLE DATABASE HAS BEEN MODIFIED.

A2.1.1.5.8. MAINTAINS TERPS PUBLICATIONS IAW AFMAN 11-230, *INSTRUMENT PROCEDURES*, ATTACHMENT 1, AND TERPS FILES IAW USAF, MAJCOM, AND BASE DIRECTIVE.

A2.1.1.5.9. DEVELOPS AND MAINTAINS A CONTINUITY FOLDER. Folder includes, as a minimum: key personnel, projects in progress, procedures listing, TERPS equipment listing, listing of local references, file maintenance and disposition plan, Flight Information Publication (FLIP) cycle review log, annual validation and procedure amendment log, and copy of completed annual/semiannual self inspection Air Traffic System Evaluation Program (ATSEP) checklist.

A2.1.1.5.10. ENSURES TERPS FILE CONTAINS CURRENT C-1, C-2, E-1, E-2, AND E-3 COMPREHENSIVE PLAN MAP.

A2.1.1.5.11. CONDUCTS ANNUAL REVIEW OF INSTRUMENT PROCEDURES IAW AFMAN 11-230 AND PROVIDES WRITTEN CORRESPONDENCE TO PARENT MAJCOM. Prepares instrument procedures report, RCS: HAF-XO(A)9609. Validates the need for each procedure, and ensures each procedure meets mission requirements.

A2.1.1.5.12. CONDUCTS BIENNIAL REVIEW.

A2.1.1.5.13. COORDINATES FLY-ABILITY CHECKS AND FLIGHT INSPECTIONS FOR NEW INSTRUMENT AND RADAR APPROACH.

A2.1.1.5.14. COMPLETES FEDERAL AVIATION ADMINISTRATION (FAA) FORM 8240-22, *FACILITY DATA SHEET*, IAW FAA Order (FAAO) 8240.36, INSTRUCTIONS FOR FLIGHT INSPECTION REPORTING.

A2.1.1.5.15. PREPARES FAA FORM 6050-4, *EXPANDED SERVICE VOLUME REQUEST*, AS REQUIRED.

A2.1.1.5.16. REVIEWS AND DOCUMENTS THAT PROCEDURAL DATA IN EACH NEW FLIP PRODUCT IS CORRECT.

A2.1.1.5.17. PROVIDES NOTIFICATION OF INSTRUMENT PROCEDURE REVISIONS TO WING CIVIL ENGINEERING AND AIRSPACE MANAGEMENT TO ENSURE COMPATIBILITY WITH THE AIR INSTALLATION COMPATIBLE USE ZONE (AICUZ). Provides information to the Chief Air Traffic Control Training (CATCT) for controller training and ready-reference file update.

A2.1.1.5.18. REVIEWS AND COMMENTS ON FAA FORM 7460-1, *FAA NOTICES OF PROPOSED CONSTRUCTION OR ALTERATION*, FOR AFFECTS ON INSTRUMENT PROCEDURES.

A2.1.1.5.19. ACCOMPLISHES AND SUBMITS A REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS, IF REQUIRED, IAW AFI 32-7061, *THE ENVIRONMENTAL IMPACT ANALYSIS PROCESS*, IN CONJUNCTION WITH EACH NEW, OR REVISED INSTRUMENT PROCEDURE.

A2.1.1.5.20. ENSURES INSTRUMENT PROCEDURES DATA REQUIRING NOTICE TO AIRMEN (NOTAM) ACTION IS PROVIDED TO AIRFIELD MANAGEMENT.

A2.1.1.5.21. ASSISTS FACILITY CHIEF CONTROLLER IN DEVELOPMENT OF VIDEO MAPPING, AND PROGRAMMABLE INDICATOR DATA PROCESSOR (PIDP) SUBMISSION.

A2.1.1.5.22. ATTENDS BASE AIRFIELD OPERATIONS BOARD MEETING.

A2.1.1.5.23. PROVIDES TRAINING AND TASK CERTIFICATION SUPPORT FOR THE ALTERNATE TERPS NCO (ATERPS). Involves alternate TERPS NCO(s) in project to ensure proficiency and project continuity.

A2.1.1.5.24. COORDINATES THE ATERPS ACTIVITIES WITH THE CHIEF CONTROLLER (CCTLR).

A2.1.1.5.25. FORWARDS WAIVER REQUEST CONCERNING TERMINAL INSTRUMENT PROCEDURES TO AIR NATIONAL GUARD/RANGES AND AIRSPACE DIVISION. Provides full justification and necessary coordination in waiver package.

A2.1.1.5.26. COORDINATES WAIVER REQUIRING SENIOR OPERATIONAL COMMANDER APPROVAL THROUGH THE ANG/C4R. Forwards special use airspace waivers directly to ANG/C4R.

A2.1.1.5.27. COMPLETES THE ANG FACILITY OPERATIONS GUIDE WITHIN 60 DAYS OF RECEIPT, PRIOR TO AN AIR TRAFFIC SYSTEMS EVALUATION, AND AT LEAST ANNUALLY.

A2.1.1.6. PERFORMS AUTOMATION SPECIALIST DUTIES:

A2.1.1.6.1. MANAGES THE INTERNAL OPERATION AND ESTABLISHES PROCEDURES FOR THE ATC AUTOMATION WORK CENTER.

A2.1.1.6.2. DIRECTS AUTOMATION ACTIVITY. Directs automation activity for system analysis and design, programming, operations, maintenance, security, systems management, technical support, and resource management.

A2.1.1.6.3. ASSISTS FUNCTIONAL USER IN DEFINING REQUIREMENTS.

A2.1.1.6.4. RECOMMENDS AUTOMATION METHODS TO ENHANCE RESOURCE USE.

A2.1.1.6.5. MAINTAINS PRECISE CONFIGURATION CONTROL OVER ATC OPERATIONAL COMPUTER PROGRAMS. Ensures compliance with FAA, USAF, and local directives and specifications for the National Airspace System (NAS).

A2.1.1.6.6. EVALUATES AND COORDINATES AUTOMATED SYSTEM UPDATE AND ENHANCEMENT WITH THE ATC STAFF PRIOR TO IMPLEMENTATION.

A2.1.1.6.7. IMPLEMENTS APPROVED ATC AUTOMATION PROGRAMMING AND FUNCTIONAL SYSTEM CHANGE IN SUPPORT OF THE WING FLYING MISSION AND FAA REQUIREMENTS.

A2.1.1.6.8. IDENTIFIES SYSTEM PROBLEM.

A2.1.1.6.9. DIRECTS ACTION WHEN SYSTEM DEFICIENCY IS RECOGNIZED. Ensures adequacy of failure recovery and de-bugging procedures.

A2.1.1.6.10. COORDINATES SOFTWARE PROBLEM WITH THE ATC STAFF, AUTOMATION SPECIALISTS AT OTHER SITES, MAJCOM, THE APPROPRIATE FAA REGION, AND FIELD SUPPORT PERSONNEL.

A2.1.1.6.11. DOCUMENTS AND SUBMITS NAS CHANGE PROPOSALS (NCP), PROGRAM TECHNICAL REPORTS (PTR), AND OTHER AUTOMATED SYSTEM ENHANCEMENT/DEFICIENCY REPORT AS REQUIRED.

A2.1.1.6.12. DIRECTS AND PLANS TESTING OF ATC AUTOMATION COMPUTER SOFTWARE.

A2.1.1.6.13. TESTS COMPUTER SOFTWARE.

A2.1.1.6.14. ARRANGES TEST ROUTINE.

A2.1.1.6.15. COORDINATES WITH THE TERMINAL PROCEDURES SPECIALIST TO OBTAIN THE MAJCOM APPROVED MSAW AND MINIMUM VECTORING ALTITUDE (MVA) DATA.

A2.1.1.6.16. ADMINISTERS THE AUTOMATED ATC RADAR SYSTEM DATABASE FOR SITE ADAPTATION, MSAW, AND DIGITAL MAPPING.

A2.1.1.6.17. INTEGRATES THE AUTOMATED ATC RADAR SYSTEM'S SITE ADAPTATION, MSAW, AND DIGITAL MAP DATABASES.

A2.1.1.6.18. MANAGES THE CONTINUOUS DATA RECORDING (CDR) AND PLAYBACK SYSTEMS.

A2.1.1.6.19. ADVISES THE AIRFIELD OPERATIONS FLIGHT COMMANDER (AOF/CC) AND OPERATIONS GROUP STAFF ON ATC AUTOMATION PROCEDURAL AND SAFETY OF FLIGHT ISSUE.

A2.1.1.6.20. DETERMINES TRAINING REQUIREMENT AND ENSURES AUTOMATION TRAINING PROGRAM IS DEVELOPED. Ensures training meets knowledge and skill requirements and enhances professional awareness of computer technologies.

A2.1.1.6.21. COORDINATES WITH THE CHIEF OF AIR TRAFFIC CONTROL OR CHIEF OF ATC TRAINING AND STANDARDIZATION TO ENSURE THE AUTOMATION TRAINING PROGRAM CONFORMS TO THE INSTRUCTIONAL SYSTEM DEVELOPMENT (ISD) PRINCIPLES ACCORDING TO AFMAN 36-2234, *INSTRUCTIONAL SYSTEM DEVELOPMENT*, AND AFI 13-203, *AIR TRAFFIC CONTROL*.

A2.1.1.6.22. PROVIDES THE CHIEF OF AIR TRAFFIC CONTROL TRAINING, AS A MINIMUM, WITH QUARTERLY PROFICIENCY TRAINING INPUTS FOR THE ATC AUTOMATION WORK CENTER PROFICIENCY TEST.

A2.1.1.6.23. ENSURES THE CDP IS IMPLEMENTED ACCORDING TO THE CDP OPERATING INSTRUCTION.

A2.1.1.6.24. IMPLEMENTS CORRECTIVE MEASURE TO ENSURE THE CDP MEETS MISSION AND AUTOMATION SPECIALIST REQUIREMENTS.

A2.1.1.6.25. ENSURES AUTOMATION PERSONNEL COMPLETE THE MONTHLY CONTROLLER AND QUARTERLY AUTOMATION PROFICIENCY TESTS DEVELOPED BY THE CHIEF OF STANDARDS AND EVALUATIONS.

A2.1.1.6.26. ENSURES TRAINING RECORD DISCREPANCY, IDENTIFIED IN THE TRAINING RECORD INSPECTION RESULTS REPORT, IS CORRECTED MONTHLY.

A2.1.1.6.27. ENSURES FAA AUTOMATED SYSTEM SOFTWARE / HARDWARE DOCUMENTATION AND APPLICABLE COMMUNICATIONS-COMPUTER SYSTEMS (C-CS) DIRECTIVES (33 SERIES) IS MAINTAINED IN THE AUTOMATION WORK CENTER.

A2.1.1.6.28. ENSURES EFFECTIVE MANAGEMENT OF MANPOWER RESOURCES ASSIGNED TO THE ATC AUTOMATION WORK CENTER.

A2.1.1.6.29. DETERMINES THE REQUIRED MINIMUM NUMBER OF QUALIFIED AUTOMATION SPECIALISTS SCHEDULED AND PRESENT FOR DUTY BASED ON SYSTEM REQUIREMENTS, PUBLISHED FACILITY HOURS, SCHEDULED FLYING, AND SERVICES REQUIRED BY THE COMMANDER.

A2.1.1.6.30. ENSURES ASSIGNED AUTOMATION SPECIALIST MEETS APPROPRIATE FLIGHT PHYSICAL QUALIFICATION REQUIREMENTS ACCORDING TO AFI 48-123, *MEDICAL EXAMINATION AND STANDARDS*.

A2.1.1.6.31. SPECIFIES IN WRITING RESPONSIBILITIES/DUTIES TO AUTOMATION ASSISTANT.

A2.1.1.6.32. MAINTAINS GENERAL SITUATIONAL AWARENESS AND IS RESPONSIBLE FOR THE OVERALL OPERATION AND MONITORING OF THE FACILITY'S ATC AUTOMATED SYSTEMS.

A2.1.1.6.33. DEVELOPS COMPUTER SOFTWARE.

A2.1.1.6.34. MODIFIES COMPUTER SOFTWARE.

A2.1.1.6.35. INTEGRATES COMPUTER SOFTWARE.

A2.1.1.6.36. PREPARES DOCUMENTATION.

A2.1.1.6.37. PERFORMS SYSTEM UPDATE.

A2.1.1.6.38. RECOMMENDS SYSTEM ENHANCEMENT AND FUNCTIONAL CHANGE.

A2.1.1.6.39. DOCUMENTS AND REPORTS ENHANCEMENT AND SYSTEM PROBLEM AS REQUIRED.

A2.1.1.6.40. STORES, CONTROLS, AND SAFEGUARDS AUTOMATED SYSTEMS OPERATIONAL COMPUTER SOFTWARE PROGRAM IN ACCORDANCE WITH LETTER OF PROCEDURE.

A2.1.1.6.41. MAINTAINS THE CDR STORAGE LIBRARY AND ADMINISTERS CDR DISC CHANGE AS REQUIRED.

A2.1.1.6.42. PERFORMS SYSTEM PLAYBACK.

A2.1.1.6.43. PERFORMS SYSTEM BACKUP.

A2.1.1.6.44. RESTORES SYSTEM SOFTWARE IN ACCORDANCE WITH LETTER OF PROCEDURE.

A2.1.1.6.45. EDUCATES USER ON THE OPERATIONAL USE OF SUPPORTED COMPUTER SYSTEM.

A2.1.1.6.46. ENSURES COMPLIANCE WITH DIRECTIVE GOVERNING SECURITY OF AUTOMATED ATC COMPUTER SYSTEM.

A2.1.1.6.47. ASSISTS THE CHIEF OF AIR TRAFFIC CONTROL TRAINING IN DEVELOPING AND INTEGRATING CONTROLLER TRAINING SCENARIOS FOR THE AUTOMATED ATC RADAR SYSTEM.

A2.1.1.6.48. MAINTAINS PROFICIENCY.

A2.1.2. CONTROL TOWER.

A2.1.2.1. PERFORMS AS WATCH SUPERVISOR/SENIOR CONTROLLER:

A2.1.2.1.1. PERFORMS TRAINING.

A2.1.2.1.2. PROVIDES CREW SUPERVISION.

A2.1.2.2. PERFORMS LOCAL CONTROLLER DUTIES:

A2.1.2.2.1. OPERATES EQUIPMENT.

A2.1.2.2.2. PROVIDES AIR TRAFFIC CONTROL SERVICE.

A2.1.2.2.3. COMPLETES AND CONDUCTS TRAINING.

A2.1.2.3. PERFORMS FLIGHT DATA DUTIES:

A2.1.2.3.1. OPERATES EQUIPMENT.

A2.1.2.3.2. PROVIDES AIR TRAFFIC CONTROL SERVICE.

A2.1.2.3.3. COMPLETES AND CONDUCTS TRAINING.

A2.1.2.4. PERFORMS GROUND CONTROLLER DUTIES:

A2.1.2.4.1. OPERATES EQUIPMENT.

A2.1.2.4.2. PROVIDES AIR TRAFFIC CONTROL SERVICE.

A2.1.2.4.3. COMPLETES AND CONDUCTS TRAINING.

A2.1.3. RADAR APPROACH CONTROL (RAPCON).

A2.1.3.1. PERFORMS WATCH SUPERVISOR/SENIOR CONTROLLER DUTIES:

A2.1.3.1.1. PERFORMS TRAINING.

A2.1.3.1.2. PROVIDES CREW SUPERVISION.

A2.1.3.2. PERFORMS APPROACH CONTROL DUTIES:

A2.1.3.2.1. OPERATES EQUIPMENT.

A2.1.3.2.2. PROVIDES AIR TRAFFIC CONTROL SERVICE.

A2.1.3.2.3. COMPLETES AND CONDUCTS TRAINING.

A2.1.3.3. PERFORMS ASSISTANT CONTROLLER DUTIES:

A2.1.3.3.1. OPERATES EQUIPMENT.

A2.1.3.3.2. PROVIDES AIR TRAFFIC CONTROL SERVICE.

A2.1.3.3.3. COMPLETES AND CONDUCTS TRAINING.

A2.1.3.4. PERFORMS ARRIVAL CONTROLLER DUTIES:

A2.1.3.4.1. OPERATES EQUIPMENT.

A2.1.3.4.2. PROVIDES AIR TRAFFIC CONTROL SERVICE.

A2.1.3.4.3. COMPLETES AND CONDUCTS TRAINING.

A2.1.3.5. PERFORMS RADAR FINAL CONTROLLER DUTIES:

A2.1.3.5.1. OPERATES EQUIPMENT.

A2.1.3.5.2. PROVIDES AIR TRAFFIC CONTROL SERVICE.

A2.1.3.5.3. COMPLETES AND CONDUCTS TRAINING.

A2.1.3.6. PERFORMS AIR TRAFFIC CONTROL TRAINING DEVICE (ATCTD) SYSTEM ADMINISTRATOR DUTIES:

A2.1.3.6.1. INSTALLS, MAINTAINS, AND UPGRADES EQUIPMENT.

A2.1.3.6.2. DEVELOPS, EDITS, AND MAINTAINS SCENARIO.

A2.1.3.6.3. PERFORMS BACKUP AND RESTORE OF SYSTEM CONFIGURATION FILE.

A2.1.3.6.4. PERFORMS SOFTWARE UPGRADE.

A2.1.3.6.5. DEVELOPS AND MAINTAINS SIMULATOR USAGE AND OUTAGE LOG.

A2.1.3.6.6. TROUBLESHOOTS HARDWARE AND SOFTWARE PROBLEM.

A2.1.3.6.7. ADDS, CHANGES, AND DELETES ATCTD USER.

A2.1.3.6.8. COORDINATES ATCTD REQUIREMENT WITH CHIEF CONTROLLER, CHIEF OF ATC TRAINING, CHIEF OF STANDARDIZATION AND EVALUATION, AND THE AIR TRAFFIC MANAGER.

A2.1.3.6.9. CONDUCTS ATCTD USER TRAINING.

A2.1.3.6.10. MAINTAINS AN ATCTD CONTINUITY BINDER.

A2.1.3.6.11. MAINTAINS PROFICIENCY IN ALL OPERATING POSITIONS IN THE FACILITY.

A2.2. INDIRECT. Indirect work involves those tasks that are not readily identifiable with the work center's specific product or service. The major categories of standard indirect work are Administers Civilian Employee, Officer, and Enlisted Personnel; Directs Work Center Activity; Provides Administrative Support; Prepares for and Conducts/Attends Meeting; Administers Training; Maintains Equipment (Aircraft and Non-Aircraft Maintenance Functions); and Performs Clean-up. See Air Force Manpower Standard (AFMS) 00AA, *Standard Indirect Allowed Man-hours*.